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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BRINEY III, WALTER F

ART UNIT

PAPER NUMBER

2614

NOTIFICATION DATE

DELIVERY MODE

06/10/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/598,929	Applicant(s) PERRIER, GAETAN	
	Examiner WALTER F. BRINEY III	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/09/09; 12/19/08; 07/15/08; 02/16/07.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

5 A person shall be entitled to a patent unless –

 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by US**
10 **Patent Application Publication 2002/0118820 A1 (published 29 August 2002)**
 (“Sinclair”).

Claim 9 is limited to “a module for use within an assembly according to claim 1.”

This claim characterizes the module as follows:

15 “the module being open at a side other than a front side, at which contacts are exposed, to allow at least one splitter circuit to be at least partially inserted into the module.”

Sinclair discloses an exemplary prior art splitter 10. *Sinclair* at ¶¶ 36-43, FIGs.1, 2.

Splitter 10 is a circuit designed with density being a primary consideration. *See id.* at ¶ 1.

Moreover, splitter 10 includes connectors dedicated solely to line, POTS and DSL
20 signals. *Id.* at ¶ 43, FIG.2. Splitter 10 arranges all connectors in a dense three column fashion on a face plate. *Id.* Opposite the face plate is an edge card with connectors 55 for receiving splitter cards 72. *Id.* at ¶¶ 57-59, FIG.7. Therefore, *Sinclair* anticipates all limitations of the claim.

Claim 10 is limited to “the module according to claim 9.” In addition, this claim
25 requires the following:

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“wherein the module is open at a rear side to allow the insertion of at least one splitter circuit from a rear side.”

The openings for splitter cards 72 are opposite to the openings for connectors 54. *See id.*

Arbitrarily considering connectors 54 as on a front side of splitter 10, splitter cards 72 are

5 on the rear side of splitter 10. Therefore, *Sinclair* anticipates all limitations of the claim.

Claim 11 is limited to “the module according to claim 9.” In addition, this claim requires “an attachment extension at a side opposite of attachment system of the module.”

Sinclair discloses a door 26 that extends from an attachment system of pivots 36, 38. *Id.*

at ¶ 40. Therefore, *Sinclair* anticipates all limitations of the claim.

10

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2005/0063531 A1 (filed 17 September 2003) (“*Arias*”) in view of US Patent Application Publication 2003/0002641 A1 (published 02 January 2003) (“*Schmoke*”) and further in view of *Sinclair*.**

20

Claim 1 is limited to “an assembly.” This claim characterizes the assembly as follows:

25

“comprising three telecommunications modules each having an equal number of contacts for connecting wires therewith,

the assembly further comprising splitter circuits, the number of splitter circuits being equal to half of the number of contacts of each module,

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one third of the contacts of the assembly being adapted to transmit a line signal, one third of the contacts of the assembly being adapted to transmit a POTS signal, and one third of the contacts of the assembly being adapted to transmit a DSLAM-signal.”

5 *Arias* discloses an intermediate distribution frame (IDF) 2 including a plurality of connection blocks 1 and filters/splitters 7. *Arias* at ¶¶ 2, 32-36, FIGs.7-9. Blocks 1 are arranged in functional groups by the addition of splitter 7 between any two blocks 1, 1’ for as many lines as are connected. *See id.* Accordingly, contacts 3 can route DSL signals, contacts 5 can route POTS signals, contacts 6 can route line signals and contacts
10 4 can be left free. *Id.* Moreover, one can attach half as many splitters as there are contacts on each block 1. *See id.* at ¶¶ 22, 32-36, FIGs.3, 7-9 (disclosing that a block has 20 pairs of connectors arranged in two rows of 10 pairs/columns, such that two blocks can be functionally grouped by up to 10 filters—one filter for each pair/column.)

15 The claimed invention includes *three* modules, all the contacts of which being evenly divided in thirds among POTS, DSL and line signals. To the contrary, IDF 2 of *Arias* only includes *two* blocks 1, 1’ being functionally grouped by filters 7, and the contacts are not evenly divided by thirds among POTS, DSL and line signals since one quarter of all contacts are left free. This difference prevents *Arias* from anticipating the claimed invention

20 One of ordinary skill in the art at the time of Applicant’s invention would have found obvious modifying IDF 2 of *Arias* in a way that eliminates the aforementioned difference between IDF 2 and the claimed invention. In particular, one of ordinary skill would have found obvious grouping blocks 1 in threes and eliminating the use of free pair 4 for the purpose of increasing density of IDF 2. The following analysis establishes

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that improving density is a primary goal of frames that include splitters, such as IDF 2 of *Arias*. The motive to increase density would have led one to eliminate the use of free pair 4 by grouping blocks 1 in threes.

Schmokol discloses a splitter assembly 50 that includes three sets of connectors 5 76, 78, 80 and a plurality of splitter cards 55. Much like splitters 7 of *Arias* split line signals for presentation to POTS and DSL connectors, splitter cards 55 split signals on line connectors 76 to provide POTS signals to connectors 78 and DSL signals to data connectors 80. Absent from assembly 50 are any free connectors, such as the free connectors 4 disclosed by *Arias*. According to *Schmokol*, a particularly important design 10 goal of its assembly 50 was an increase in circuit density. *Id.* at ¶¶ 3-4.

Sinclair discloses another exemplary prior art splitter 10, similar to IDF 2 of *Arias* and splitter assembly 50 of *Schmokol*. *Sinclair* at ¶¶ 36-43, FIGs.1, 2. Much like splitter assembly 50 of *Schmokol*, splitter 10 is a circuit designed with density being a primary consideration. *See id.* at ¶ 1. Moreover, like assembly 50, splitter 10 includes connectors 15 dedicated solely to line, POTS and DSL signals, no test connectors are illustrated. *See id.* at ¶ 43, FIG.2. Finally, splitter 10 arranges all connectors in a dense three column fashion on a face plate similar to the way connectors 3, 4, 5 and 6 of *Arias* are arranged on a face plate. *Id.*

The teachings *Schmokol* and *Sinclair* would have reasonably suggested to one of 20 ordinary skill in the art that density is a primary concern in designing any splitter circuitry. Accordingly, one of ordinary skill would have been motivated to increase density in IDF 2 of *Arias* where possible. A comparison of IDF 2 of *Arias* with the

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splitter assembly 50 of *Schmokol* and splitter 10 of *Sinclair* would reasonably have suggested that the free pairs 4 of *Arias* decrease overall splitter density. In particular, whereas *Arias* includes free pairs 4, *Schmokol* and *Sinclair* lack any such free pairs. Accordingly, one of ordinary skill would have found free pairs 4 as inimical to maximum density in IDF 2. A possible solution is suggested by an examination of *Schmokol*. Specifically, *Schmokol* at FIG.6 depicts that where a splitter includes six rows of connectors, the rows can be evenly divided in thirds between line, POTS and DSL signals. This would have reasonably suggested to one of ordinary skill wishing to improve the density of IDF 2 of *Arias* that he could have modified filters 7 to functionally group blocks 1 in threes instead of twos. Therefore, *Arias* in view of *Schmokol* and further in view of *Sinclair* makes obvious all limitations of the claim.

Claim 2 is limited to “the assembly according to claim 1.” In addition, this claim requires that “all contacts of one module are adapted to transmit DSLAM-signals.” The foregoing rejection of claim 1 showed that one of ordinary skill would have found obvious modifying IDF 2 of *Arias* to group blocks 1 in threes instead of twos and to eliminate free pair 4 to maximize density of IDF 2. The rejection did not make any showing as to the claimed arrangement of DSL contacts.

One of ordinary skill, in implementing the combination set forth in the rejection of claim 1 would have found obvious modifying IDF 2 of *Arias* in a way that contemplates the limitations of this claim. In particular, by eliminating free pair 4 as a free pair and designating it for use with line, POTS or DSL signals, one would have to determine which signal of the three signal types to associate with the formally free pair.

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As *Arias* already suggests designing one of blocks 1 to include line and POTS signals while another of blocks 1 has DSL and free signals, one of ordinary skill would have very likely reasoned that the free pair 4 should be used for DSL signals, minimizing any redesign of IDF 2. Therefore, *Arias* in view of *Schmoke* and further in view of *Sinclair*
5 makes obvious all limitations of the claim.

Claim 3 is limited to “the assembly according to claim 2.” In addition, this claim requires the following:

“wherein the module having contacts all of which are adapted to transmit a DSLAM-signal is arranged between the two other modules.”

10 The foregoing rejection of claim 1 showed that one of ordinary skill would have found obvious modifying IDF 2 of *Arias* to group blocks 1 in threes instead of twos and to eliminate free pair 4 to maximize density of IDF 2. The rejection did not make any showing as to the claimed arrangement of modules.

One of ordinary skill, in implementing the combination set forth in the rejection
15 of claim 1 would have found obvious modifying IDF 2 of *Arias* in a way that contemplates the limitations of this claim. In particular, by modifying IDF 2 of *Arias* to include functional groups of three blocks 1 instead of two blocks, one would have to determine how to arrange the blocks in the functional group. As *Arias* already suggests arranging the blocks in an adjacent fashion, such that the splitter 7 only needs span the
20 distance between two adjacent blocks, one of ordinary skill would have very likely reasoned that each block in a three block group should be arranged in an fashion that allows filters 7 to connect adjacent blocks. Therefore, *Arias* in view of *Schmoke* and further in view of *Sinclair* makes obvious all limitations of the claim.

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Claim 4 is limited to “the assembly according to claim 1.” In addition, this claim requires the following:

5 “wherein half of the contacts of at least one module are adapted to transmit a line signal and a remaining half of the contacts of this module are adapted to transmit a POTS signal.”

Arias discloses splitting the connectors of one of blocks 1 evenly between POTS and line signals. *Arias* at ¶¶ 32-35, FIGs.7-9. Therefore, *Arias* in view of *Schmokol* and further in view of *Sinclair* makes obvious all limitations of the claim.

10 **Claim 5** is limited to “the assembly according to claim 1.” In addition, this claim requires the following:

 “wherein the splitter circuit has three pairs of two contacts which are connected with the contacts of the telecommunications modules.”

15 The foregoing rejection of claim 1 showed that one of ordinary skill would have found obvious modifying IDF 2 of *Arias* to group blocks 1 in threes instead of twos and to eliminate free pair 4 to maximize density of IDF 2. One would have accordingly modified filter 7 of *Arias* to include three pairs of contacts instead of just two pairs of contacts. *See Arias* at ¶ 35, FIGs.7-9. Therefore, *Arias* in view of *Schmokol* and further in view of *Sinclair* makes obvious all limitations of the claim.

20 **Claim 13** is limited to “the assembly according to claim 1.” In addition, this claim requires “a DSLAM.” *Arias* discloses combining IDF 2 with a DSLAM 7. *Id.* at ¶ 19, FIG.1. Therefore, *Arias* in view of *Schmokol* and further in view of *Sinclair* makes obvious all limitations of the claim.

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3. Claims 6-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Arias* in view of *Schmoke* in view of *Sinclair* and further in view of US Patent 5,800,187 (patented 01 September 1998) (“*Vernon*”).

Claim 6 is limited to “the assembly according to claim 1.” In addition, this claim
5 requires the following:

“at least one carrier, the modules being attachable to the carrier and adapted to allow swiveling of the modules with regard to the carrier.”

Arias discloses mounting modular blocks 1 in an IDF 2. While IDF 2 provides a carrier function, there is no disclosed swiveling between blocks 1 and IDF 2. To the contrary,
10 the claimed invention requires swiveling between the claimed modules and claimed carrier.

One of ordinary skill in the art at the time of Applicant’s invention would have found obvious a modification to IDF 2 of *Arias* that would have eliminated the foregoing difference between *Arias* and the claimed invention. In particular, one would have found
15 obvious modifying IDF 2 to mount modular blocks 1 in a pivoting fashion.

Vernon discloses an assembly that includes a plurality of connection strips 1, similar to the modular blocks 1 of *Arias* since both terminate communication lines.

Vernon at col. 1 ll. 5-10, col. 3 ll. 54-65, FIG.1. Moreover, *Vernon* discloses mounting in a pivoting fashion each strip 1 to a metal frame 2 corresponding to the claimed carrier.

20 *Id.*

One of ordinary skill in the art at the time of Applicant’s invention would have recognized from *Vernon* an alternative to the IDF 2 of *Arias*. In particular, one would have recognized that he could connect blocks 1 of *Arias* to a metal frame in a pivoting

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fashion just as connection strips 1 of *Vernon* are connected to metal frame 2 in a pivoting fashion. Therefore, *Arias* in view of *Schmoke* in view of *Sinclair* and further in view of *Vernon* makes obvious all limitations of the claim.

Claim 7 is limited to “the assembly according to claim 6.” In addition, this claim
5 requires the following:

“wherein the carrier is at least partially open at a side opposite the attachment to the carrier.”

Vernon discloses that metal frame 2 corresponding to the claimed carrier is partially open at numeral 26, opposite to the pivoting connection between frame 2 and connection
10 strip 1. *Id.* at col. 4 ll. 63-67, FIG.1. Accordingly, one of ordinary skill in the art at the time of Applicant’s invention that sought to modify IDF 2 of *Arias* to conform to the assembly of *Vernon* would have included opening 26 opposite to a pivoting connection between modular blocks 1 of *Arias* and metal frame 2 of *Vernon*. Therefore, *Arias* in view of *Schmoke* in view of *Sinclair* and further in view of *Vernon* makes obvious all
15 limitations of the claim.

Claim 8 is limited to “the assembly according to claim 6.” In addition, this claim requires the following:

“an adapter at the least partially open side of the carrier which connects the module with the carrier.”

20 *Vernon* discloses that connection strip 1 includes locking catches 12 for latching the strip to metal frame 2. *Id.* at col. 4 ll. 36-38, FIG.1. Accordingly, one of ordinary skill in the art at the time of Applicant’s invention that sought to modify IDF 2 of *Arias* to conform to the assembly of *Vernon* would have included locking catches 12 with blocks 1 of

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Arias to latch with a metal frame, like metal frame 2 disclosed by *Vernon*. Such locking catches 12 correspond to the claimed adapter since they would adapt modular blocks 1 of *Arias* for connection with metal frame 2 of *Vernon*. Therefore, *Arias* in view of *Schmoke* in view of *Sinclair* and further in view of *Vernon* makes obvious all limitations of the claim.

Claim 12 is limited to “the assembly according to claim 1.” In addition, this claim requires the following:

“in combination with a rack and/or a cabinet, which includes the carrier.”

Vernon discloses that metal frame 2 can be mounted in a cabinet or rack. *Id.* at col. 3 ll.

Accordingly, one of ordinary skill in the art at the time of Applicant’s invention that sought to modify IDF 2 of *Arias* to conform to the assembly of *Vernon* would have included the assembly of blocks 1 of *Arias* and metal frame 2 of *Vernon* in a cabinet or rack as claimed. Therefore, *Arias* in view of *Schmoke* in view of *Sinclair* and further in view of *Vernon* makes obvious all limitations of the claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WALTER F. BRINEY III whose telephone number is (571)272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Curtis A. Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For
5 more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Walter F. Briney III/
Primary Examiner
Art Unit 2614

6/8/10